REMARKS/ARGUMENTS

Claims 1-17, 19-21, 23-24, and 31 stand rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent No. 5,670,984 to Robertson et al. ("Robertson").

Claims 18, 22 and 25-30 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Robertson as applied to Claims 1-17, 19-21, 23-24, and 31, and further in view of United States Patent No. 5,731,805 to Tognazzini et al. ("Tognazzini").

Claim 1 has been amended to overcome these rejections and/or to better define the invention. In addition, new Claim 32-35 have been added to better define the invention. No new matter has been entered by these amendments. Consequently, the Examiner is respectfully requested to consider the amended and new claims in view of the following comments.

As recited in amended Claim 1, the Applicant's invention is directed toward a method for displaying a region of interest while transitioning between first and second locations for the region of interest within visual information on a display screen of a computer, comprising:

applying a transformation to a border region of the region of interest in the visual information to improve visual detail in the border region of the region of interest by: creating a lens surface for the border region having a lens surface shape; and, creating a presentation by overlaying the visual information on the lens surface and projecting the lens surface with the visual information onto a plane in a uniform direction aligned with a viewpoint, wherein at least one of the lens surface shape and the viewpoint remain constant during the transitioning between the first and second locations; and,

displaying the presentation on the display screen.

The Applicant believes that amended Claim 1 is patentable over Robertson and Tognazzini as these references do not teach or suggest the subject matter of amended Claim 1. Similarly, the Applicant believes that Claims 2-8 and 10-31, being dependent on amended Claim 1 and adding novel and inventive elements thereto, are also patentable over the Robertson and Tognazzini references.

With respect to the "Response to Arguments" section of the Office Action, on page 12 of the Office Action the Examiner states:

"Applicant argues (pp. 7, Para 5) the present invention does not vary the projection direction over the lens as it does in Robertson...In reply, Robertson teaches moving the viewpoint to keep the lensed panel in view (col. 4, ll. 25-30; col. 8-9, ll. 63-7; Fig. 1c), which suggests that the viewpoint is varied as the lens is varied. Hence, Robertson suggests that the viewpoint is not varied over the lens."

In Robertson, a lens at a first location has a first viewpoint. When the lens is moved from the first location to a second location, the lens at the second location has a second viewpoint. The viewpoint moves. It is in a different location for each of the first and second lens locations. The relative position of the viewpoint with respect to the lens does not vary. However, the viewpoint for the first and second locations does vary. There are two viewpoints, one for each location.

In contrast, in the Applicant's invention, the viewpoint remains "constant". That is, the viewpoint is the same for each of the first and second lens locations. There is one viewpoint. The projection direction is uniform for all displaced points in the lens in that at each of the first and second lens locations the projection direction is toward the viewpoint which does not move. Again, there is only one viewpoint. In Robertson, there are two viewpoints. Accordingly, and to clarify this point for the Examiner, amended Claim 1 now recites "during the transitioning between the first and second locations" after the word "constant".

On page 12 of the Office Action the Examiner states:

"Applicant argues (pp.7, Para 5) the present invention does not change the lens shape when a new location for the region of interest is desired...In reply, Robertson teaches changing the lens position and the viewpoint position to maintain view of the moving lens (col. 4, ll. 25-30; col. 8-9, ll. 63-7), without changing the shape of the lens. Thus, Robertson does not teach changing the shape of the lens when a new region of interest, as designated by a change in viewpoint, is desired."

The Applicant respectfully summits that the Examiner may have either misread Robertson or may have read selections from Robertson out of context. At col. 8, lines 59-62 of Robertson,

that's the paragraph in Robertson just before the selection referred to by the Examiner above, the following is stated:

"At block 308 [i.e., of FIG. 6], CPU 130 recalculates the lens position and size. As explained above, the position adjustments modify the values of lens_x, lens_y, and lens_z, while the size adjustments modify the values of lens_width and lens_height."

The Applicant respectfully submits that a change in the width or the height of a lens obviously results in a change in the shape of the lens. For example, if one changes the width of a square to produce a rectangle, one causes a change in shape of the square, namely, from a square shape to a rectangular shape. The Applicant respectfully submits that contrary to the Examiner's reading of Robertson, Robertson clearly teaches changing the shape of a lens when changing the position of the lens. This is what is clearly stated in the above selection from Robertson.

Finally, on pages 12-13 of the "Response to Arguments" section of the Office Action the Examiner states:

"Applicant argues (pp. 8, Para 3) Robertson does not teach when transitioning a region of interest from a first location to a second location, only a boarder region surrounding the region of interest is transformed; and the visual information within the region of interest itself is not subject to transformation during the transitioning...In reply, Applicant fails to claim only applying a transformation to a border region surrounding the region of interest. Additionally, Applicant's specification discloses an elastic presentation space, EPS, which 'is characterised by magnification of areas of an image where detail is desired' (Specification pp. 8, 1l. 3-7). Thus, Applicants specification suggests, as does Robertson, that all of the region of interest is magnified when the lens is positioned relative to/over the desired region and not just the border of the region."

In order to better define the invention, amended Claim 1 now specifically recites "applying a transformation to a border region of the region of interest in the visual information to improve visual detail in the border region of the region of interest...". This amendment should clarify for the Examiner that only the border region is transformed according to the Applicant's invention and claims. In fact, that only the border region is transformed is apparent from the subject matter

of previously presented Claims 2, 3, 4, 6, 7, and 8, all of which are directed towards aspects of the border region specified in Claim 1.

With respect to the selection from the Applicant's specification as quoted by the Examiner (see above), the "areas of an image where detail is desired" in the present invention is the border region. This is what Claim 1 is, and always was, directed toward.

Furthermore, the Applicant respectfully submits that in no way does the Applicant's specification suggest that "all of the region of interest is magnified when the lens is positioned relative to/over the desired region and not just the border of the region". The Applicant respectfully submits that the Examiner may have either misread the specification or may have read selections from the specification out of context. In particular, that the transformation is only to the border region of the region of interest is clearly described in the specification on page 11, paragraph 2, which is entitled "Restricted Rendering of Lens During Lens Motion", and which recites:

"Restricted Rendering of Lens During Lens Motion. According to another aspect of the invention, a restricted portion of the region of interest (i.e., the 'lens') 233, for example the border or periphery 420, 430 of a lens 410, is rendered to a display 340 during the movement of the lens about the data space...By rendering only a portion of the lens 410, the computations required for lens movement and rendering are minimized while a presentation of the changing location of the lens is maintained..."

With respect to Elastic Presentation Space ("EPS") technology, to assist the Examiner in understanding this technology, the Examiner is directed to Chapters 3.6 and 3.7 of the thesis "A Framework for Elastic Presentation Space" by Marianne S. T. Carpendale which is referred to in the specification on page 6 and incorporated therein by reference. A copy of this thesis was provided to the Examiner in an Information Disclosure Statement filed on October 2, 2002.

Thus, the Applicant believes that amended Claim 1 is clearly patentable over Robertson and Tognazzini as these references do not teach or suggest the subject matter of amended Claim 1. In particular, Robertson and Tognazzini do not teach or suggest "applying a transformation to a border region of the region of interest in the visual information to improve visual detail in the

border region of the region of interest by: creating a lens surface for the border region having a lens surface shape; and, creating a presentation by overlaying the visual information on the lens surface and projecting the lens surface with the visual information onto a plane in a uniform direction aligned with a viewpoint, wherein at least one of the lens surface shape and the viewpoint remain constant during the transitioning between the first and second locations." In addition, the Applicant believes that Claims 2-8 and 10-31, being dependent on amended Claim 1 and adding novel and inventive elements thereto, are also patentable over the Robertson and Tognazzini references.

With respect to the "Claims Rejections" sections of the Office Action beginning on page 2 of the Office Action, the Applicant believes that amended Claim 1 is patentable over Robertson and Tognazzini as these references do not teach or suggest, for the reasons given above, those elements of Amended Claim 1 that recite "applying a transformation to a border region of the region of interest..." and "...during the transitioning between the first and second locations". In addition, the Applicant believes that Claims 2-8 and 10-31, being dependent on amended Claim 1 and adding novel and inventive elements thereto, are also patentable over the Robertson and Tognazzini references.

Now, in order to better define the invention, new Claims 32-35 have been added. These new claims are fully supported by paragraph 2 on page 11 of the Applicant's specification. New Claim 32 is directed toward a method in a computer system for generating a presentation of a region of interest in an original image for display on a display screen, comprising:

applying a lens to a border region of the region of interest in the original image by displacing the border region onto the lens and projecting the displacing onto a plane in a uniform direction aligned with a viewpoint, wherein at least one of the lens and the viewpoint remain constant while transitioning between first and second locations for the region of interest in the original image.

The Applicant believes that new Claim 32 is clearly patentable over Robertson and Tognazzini as these references do not teach or suggest the subject matter of new Claim 32. In particular, Robertson and Tognazzini do not teach or suggest those elements of new Claims 32 that recite

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"applying a lens to a boarder region of the region of interest in the original image by displacing the border region onto the lens and projecting the displacing onto a plane in a uniform direction aligned with a viewpoint, wherein at least one of the lens and the viewpoint remain constant while transitioning between first and second locations for the region of interest in the original image".

New Claim 33 adds the element of displaying the presentation on the display screen to new Claim 32. New Claim 34 adds an element wherein the lens has a magnified region for the border region. And, new Claim 35 adds an element wherein the magnified region has a diminishing magnification. The Applicant believes that new Claims 33-35, being dependent on new Claim 32 and adding novel and inventive elements thereto, are also patentable over the Robertson and Tognazzini references.

The Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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